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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/832,456	04/10/2001	Ramanathan Jagadeesan	2705-136	8842

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MARGER JOHNSON & McCOLLOM, P.C.  
1030 S.W. Morrison Street  
Portland, OR 97205

EXAMINER

TON, ANTHONY T

ART UNIT	PAPER NUMBER
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2661

DATE MAILED: 08/24/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 09/832,456	<b>Applicant(s)</b> JAGADEESAN ET AL.	
	<b>Examiner</b> Anthony T Ton	<b>Art Unit</b> 2661	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 10 April 2001.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-51 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-51 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

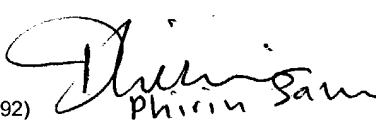
- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 April 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Specification*

1. The disclosure is objected to because of the following informalities:

a) Term “modems 116, **188**” in line 27 page 5 is improper since the modem 188 is not associated with the modem 126 shown in Fig.1.

Examiner suggests changing this term to “modems 116, **126**”.

b) Term “gateway **140**” in line 16 page 6 is improper.

Examiner suggests changing this term to “gateway **150**”.

Appropriate correction is required.

### *Claim Objections*

2. The numbering of claims is not in accordance with 37 CFR 1.126 which requires the original numbering of the claims to be preserved throughout the prosecution. When claims are canceled, the remaining claims must not be renumbered. When new claims are presented, they must be numbered consecutively beginning with the number next following the highest numbered claims previously presented (whether entered or not).

Misnumbered claims **30-49** have been renumbered **32-51**, respectively since **claims 30** and **31** are numbered twice.

**Therefore**, the following renumbered (i.e. new number) dependent claims must change to be associated with such a renumbering; the change should be as follows:

a) **Claim 32**: Term “claim 32” in line 1 should be changed to “claim **28**” (**Note**: this change may not be correct since the original claim 30 was depending on claim 32, but this claim

cannot depend on claim 32. It may be dependent to one of the previous claims from 28-31. At this Office Action, Examiner examines this renumbered claim 32 being dependent on claim 28 as the change above. Any further change, which depends on the Applicant);

- b) **Claims 34 and 35:** Term “claim 31” in line 1 should be changed to “claim 33”;
- c) **Claims 37-40:** Term “claim 34” in line 1 should be changed to “claim 36”;
- d) **Claims 42-45:** Term “claim 39” in line 1 should be changed to “claim 41”;
- e) **Claims 47-49:** Term “claim 44” in line 1 should be changed to “claim 46”; and
- f) **Claim 51:** Term “claim 48” in line 1 should be changed to “claim 50”.

3. **Claims 1, 3 and 11** are objected to because of the following informalities:

a) **In claim 1:** Term “**WB** telephone” in line 3 is improper since the abbreviation “WB” should be spelled out at least once.

Examiner suggests changing this term to “**wideband** telephone”.

b) **In claim 3:** Term “**DSVD** modem” in line 2 is improper since the abbreviation “DSVD” should be spelled out at least once.

Examiner suggests changing this term to “**digital simultaneous voice and data** modem”.

c) **In claim 11:** Term “**and**” in line 2 is improper.

Examiner suggests deleting this term from the line 2 of the claim.

#### ***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. **Claims 1-3, 5 and 6** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Chan et al.** (US Patent No. 6,711,160) in view of **Cave et al.** (US Patent No. 6,404,746) (hereinafter referred to as **Chan** and **Cave** respectively) and the **Admitted Prior Art**.

a) **In Regarding to Claims 1 and 5: Chan disclosed** a device for use with a voice gateway coupled in a network adapted to transmit network packets that meet a minimal protocol (*see Fig.1*), comprising:

an encoder coupled to receive the sound signals and to encode them as voice data bits (*see col.4 line 35-43*);

a packetizer for packetizing groups of the voice data bits into intermediate packets which do not meet the minimum protocol (*see col.4 lines 46-54*); and

a modem adapted to establish a first circuit switched connection, and coupled to transmit the intermediate packets through the first connection (*see col.4 lines 43-46, and col.6 lines 40-45*).

**Chan failed to explicitly disclose** a wideband telephone adapted to convert sound into sound signals that capture a bandwidth of the sound that includes a range of 200 Hz to 5 kHz (and the bandwidth includes a range of 150 Hz to 7.1 kHz as recited in **claim 5**); and

a voice gateway coupled to the modem via the first circuit switched connection.

**The Admitted Prior Art** on lines 15-18 in page 1 of the specification shows a **wideband telephone** that is an improvement over common telephone; it encodes a larger portion of the

voice frequency range from **150 Hz to 7.1 kHz. Therefore**, the Admitted Prior Art explicitly shows such a wideband telephone of the instant claims.

At the time of the invention, it would be obvious to a person of ordinary skill in the art to combine such a wideband telephone adapted to convert sound into sound signals that capture a bandwidth of the sound that includes a range of 200 Hz to 5 kHz and a range of 150 Hz to 7.1 kHz, as taught by the Admitted Prior Art with Chan in a purpose of a speed-up dial for information exchange in an IP network. The motivation for doing so would have been to provide an IP phone capability to replace a plain old telephone set and make Chan more efficient (*see Chan, col.1 lines 39-46*). Therefore, it would have been obvious to combine the Admitted Prior Art with Chan in the invention as specified in the claims; and

**Cave explicitly disclosed** such a voice gateway coupled to the modem via the first circuit switched connection (*see Fig.6: Gateway 606 and G.711*).

At the time of the invention, it would be obvious to a person of ordinary skill in the art to combine such a voice gateway coupled to the modem via the first circuit switched connection, as taught by Cave with Chan, so that appropriate communication data can be directed to a communication destination device via an IP network. The motivation for doing so would have been to route only voice calls to a packet-voice response unit in a communication network. Therefore, it would have been obvious to combine Cave with Chan in the invention as specified in the claims.

**b) In Regarding to Claim 2: Chan further disclosed** the device of claim 1, further comprising a decoder coupled to receive other voice data bits through the connection and the modem (*see Dual Codec 107 in Fig.1*).

c) **In Regarding to Claim 3:** Chan further disclosed the device of claim 1, wherein the modem is a digital simultaneous voice and data (DSVD) modem (*see col.3 line 55-64*).

d) **In Regarding to Claim 6:** Chan further disclosed the device of claim 1, wherein the encoder encodes at a rate of at least 16 kbps (*see col.5 lines 34-36: H.323; hence, Chan inherently disclosed such an encoder encoding at a rate of at least 16 kbps since H.323 comprises of a standard G.728 that encodes/decodes of speech at 16 kbps*).

6. **Claim 4** is rejected under 35 U.S.C. 103(a) as being unpatentable over **Chan et al.** (US Patent No. 6,711,160) in view of **Cave et al.** (US Patent No. 6,404,746) and the **Admitted Prior Art** as applied to claims 1 and 5 above, and further in view of **Sistanizadeh et al.** (US Patent No. 5,790,548) hereinafter referred to as **Sistanizadeh**.

**Chan disclosed** all aspects of this claim as set forth in claim 1.

**Chan failed to explicitly disclose** the first connection has a rated capacity of 28.8 kbps

**Sistanizadeh explicitly disclosed** such a connection has such a rated capacity of 28.8 kbps (*see col.3 lines 2-8*).

At the time of the invention, **it would be obvious** to a person of ordinary skill in the art to combine such a connection with such a rated capacity of 28.8 kbps, as taught by Sistanizadeh with Chan in a purpose of multi-media services including Internet access. **The motivation** for doing so would have been to provide more bandwidth to residential consumers. Therefore, it would have been obvious to combine Sistanizadeh with Chan in the invention as specified in the claim.

7. **Claims 7, 9, 16, 17, 26, 27, 36, 40, 50 and 51** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Chiu et al.** (US Patent Application Publication No. **US 2002/0071424 A1**) hereinafter referred to as **Chiu**, in view of **Cave et al.** (US Patent No. **6,404,746**).

a) **In Regarding to Claim 7: Chiu disclosed** a device comprising:

means for establishing a connection with a first device at a first endpoint of a network capable of transmitting network data packets, which meet a minimal protocol (*see Fig.4: 428 and 430 (means for establishing a first connection), and Paragraph [0038] (data packets which meet a minimal protocol)*);

means for converting sound into sound signals (*see Fig.4: 402*);

means for encoding the sound signals into voice data bits at a rate of at least 16 kbps (*see Fig.4: 404, and Paragraph [0037]: H.323; hence, Chiu inherently disclosed such an encoder encoding at a rate of at least 16 kbps since H.323 comprises of a standard G.728 that encodes/decodes of speech at 16 kbps*);

means for packetizing groups of the voice data bits into intermediate packets which do not meet the minimum protocol (*see Fig.4: 434*); and

means for transmitting the intermediate packets through the first connection (*see Paragraph [0042]*).

**Chiu failed to explicitly disclose** means for establishing a first **circuit switched telephone** connection with a **first device** at a first endpoint of a network.

**Cave explicitly disclosed** such a means for establishing a first circuit switched telephone connection with a first device at a first endpoint of a network (*see col.12 lines 47-61*).

At the time of the invention, it would be obvious to a person of ordinary skill in the art to combine such a means for establishing a first circuit switched telephone connection with a first device at a first endpoint of a network, as taught by Cave with Chiu, so that communication data can be transmitted/received to/from a next forwarding device properly. The motivation for doing so would have been to provide a coupling between a local communication gateway and an end user in a communication network. Therefore, it would have been obvious to combine Cave with Chiu in the invention as specified in the claims.

**b) In Regarding to Claim 9: Chiu further disclosed** the device of claim 7, further comprising:

means for receiving through the first connection return intermediate packets (*see Fig.4: 430 and 428*);

means for depacketizing the return intermediate packets to derive return voice data bits (*see fig.4: 422, and Paragraphs [0044] and [0045]*);

means for decoding the return voice data bits to produce return sound signals (*see Fig.4: 404, and Paragraph [0047]*); and

means for producing a return sound from the return sound signals (*see Fig.4: 400*).

**c) In Regarding to Claims 16 and 17: Chiu disclosed** all aspects of these claims as set forth in claims 7 and 9; and

**Chiu further disclosed** an analog to digital converter for digitizing voice signals received from the analog wideband telephone (*see Fig.4: 404*), and Chiu inherently disclosed a modem contemplated in the manner of the network interface 440 (*see Paragraph [0042]: modem -ppp*)

However, **Chiu failed to explicitly disclosed** a voice gateway coupled to the modem via the first circuit switched connection.

**Cave explicitly disclosed** such a voice gateway coupled to the modem via the first circuit switched connection (*see Fig.6: Gateway 606 and G.711*).

At the time of the invention, it would be obvious to a person of ordinary skill in the art to combine such a voice gateway coupled to the modem via the first circuit switched connection, as taught by Cave with Chiu, so that communication data can be directed to a communication destination device via an IP network. The motivation for doing so would have been to route only voice calls to a packet-voice response unit in a communication network. Therefore, it would have been obvious to combine Cave with Chiu in the invention as specified in the claims.

**d) In Regarding to Claims 26 and 27:** these claims claimed for a device located at the receiving side of a communication network while the claims 7 and 9 claimed for a device located at the transmitting side of the communication network. All claimed subject matters of claims 26 and 27 have been disclosed by claims 7 and 9. Therefore, the rejections to claims 7 and 9 would also apply to claims 26 and 27 as a device at the receiving side as taught.

**e) In Regarding to Claims 36 and 40:** these claims are rejected for the same reasons as claims 7 and 9 respectively because the apparatus in claims 7 and 9 can be used to practice the method steps of the claims 36 and 40.

**f) In Regarding to Claims 50 and 51:** these claims are rejected for the same reasons as claims 26 and 27 respectively because the apparatus in claims 26 and 27 can be used to practice the method steps of the claims 50 and 51.

8. **Claims 8 and 38** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Chiu et al.** (US Patent Application Publication No. **US 2002/0071424 A1**) in view of **Cave et al.** (US Patent No. **6,404,746**) as applied to claims 7 and 9 above, and further in view of **Gardell et al.** (US Patent No. **6,707,797**) hereinafter referred to as **Gardell**.

a) **In Regarding to Claim 8:** **Chiu disclosed** all aspects of this claim as set forth in claim 7.

**Chiu failed to explicitly disclose** means for multiplexing additional data with the voice data bits prior to transmitting.

**Sistanizadeh explicitly disclosed** such a means for multiplexing additional data with the voice data bits prior to transmitting (*see col.2 lines 43-47*).

At the time of the invention, **it would be obvious** to a person of ordinary skill in the art to combine such a means for multiplexing additional data with the voice data bits prior to transmitting, as taught by Gardell with Chiu in a purpose of multiplexing voice data from multiple callers into a data packet. **The motivation** for doing so would have been to deliver voice data of multiple callers to a destination in a manner of data packets. Therefore, it would have been obvious to combine Gardell with Chiu in the invention as specified in the claim.

b) **In Regarding to Claim 38:** this claim is rejected for the same reasons as claim 8 because the apparatus in claim 8 can be used to practice the method steps of the claim 38.

9. **Claims 10 and 37** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Chiu et al.** (US Patent Application Publication No. **US 2002/0071424 A1**) in view of **Cave et al.** (US

Patent No. **6,404,746**) as applied to claims 7 and 9 above, and further in view of **Sistanizadeh et al.** (US Patent No. **5,790,548**).

a) **In regarding to Claim 10: Chiu disclosed** all aspects of this claim as set forth in claim 7.

**Chiu failed to explicitly disclose** the first connection has a rated capacity of 28.8 kbps  
**Sistanizadeh explicitly disclosed** such a connection has such a rated capacity of 28.8 kbps (*see col.3 lines 2-8*).

At the time of the invention, **it would be obvious** to a person of ordinary skill in the art to combine such a connection has such a rated capacity of 28.8 kbps, as taught by Sistanizadeh with Chiu in a purpose of multi-media services including Internet access. **The motivation** for doing so would have been to provide more bandwidth to residential consumers. Therefore, it would have been obvious to combine Sistanizadeh with Chiu in the invention as specified in the claim.

b) **In Regarding to Claim 37:** this claim is rejected for the same reasons as claim 10 because the apparatus in claim 10 can be used to practice the method steps of the claim 37.

10. **Claim 39** is rejected under 35 U.S.C. 103(a) as being unpatentable over **Chiu et al.** (US Patent Application Publication No. **US 2002/0071424 A1**) in view of **Cave et al.** (US Patent No. **6,404,746**) as applied to claim 36 above, and further in view of the **Admitted Prior Art**.

**Chiu disclosed** all aspects of this claim as set forth in claim 36.

**Chiu failed to explicitly disclose** a wideband includes a range of 150 Hz to 7.1 kHz.

**The Admitted Prior Art** on lines 15-18 in page 1 of the specification shows a wideband telephone that is an improvement over common telephone; it encodes a larger portion of the

voice frequency range from 150 Hz to 7.1 kHz. **Therefore**, the Admitted Prior Art explicitly shows such a wideband of the instant claim.

At the time of the invention, it would be obvious to a person of ordinary skill in the art to combine such a wideband includes a range of 150 Hz to 7.1 kHz, as taught by the Admitted Prior Art with Chiu in a purpose of a speed-up dial for information exchange in an IP network. The motivation for doing so would have been to provide an IP phone capability to replace a plain old telephone set and make Chiu more efficient. Therefore, it would have been obvious to combine the Admitted Prior Art with Chiu in the invention as specified in the claim.

11. **Claims 11-13, 15, 18-20, 22-24, 28-30, 32-35, 41-43 and 45-48** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Chan et al.** (US Patent No. **6,711,160**) in view of **Cave et al.** (US Patent No. **6,404,746**).

a) **In Regarding to Claim 11: Chan disclosed** a gateway comprising:

a network interface for coupling to a network (*see Fig.6: NIC 103 in step 280*);

a processor coupled with the network interface (*see Fig.6: DSP 102 in step 286*), wherein the processor is adapted to establish a first circuit switched telephone connection (*see Fig.6 steps 298 and 300*);

establish a second packet switched network connection through a network (*see Fig.6 steps 276 and 278*);

receive through the first connection a stream of intermediate packets that include voice data bits (*see step 248 in Fig.5*), which represent sound that has been encoded at a rate of at least 16 kbps (*see col.5 lines 34-36: H.323; hence, Chan inherently disclosed such an encoder*

*encoding at a rate of at least 16 kbps since H.323 comprises of a standard G.728 that encodes/decodes of speech at 16 kbps);*

add packet headers to the intermediate packets to form network packets (*see col.6 lines 33-39*); and

transmit the network packets through the second connection (*see steps 232 and 244 in Fig.4*).

**Chan failed to explicitly disclose** wherein to establish a first circuit switched telephone connection with **a modem**, and establish a second packet switched network connection through a network with **a device at an endpoint of the network**.

**Cave disclosed** such a modem and such a device at an endpoint of the network (*see Fig.3: Modem 610 and Gateway 626*).

At the time of the invention, it would be obvious to a person of ordinary skill in the art to combine such a modem and such a device at an endpoint of the network, as taught by Cave with Chan, so that communication data can be transmitted/received to/from a next forwarding device properly. The motivation for doing so would have been to provide a coupling between communication gateways located at the source and destination sides in a communication network. Therefore, it would have been obvious to combine Cave with Chan in the invention as specified in the claims.

**b) In Regarding to Claim 12: Chan further disclosed** the gateway of claim 11, wherein the processor is further adapted to receive first dialing information (*see col.4 lines 43-46*), wherein the first dialing information is used to establish the second connection (*see col.9 lines 31-67*).

c) **In Regarding to Claim 13:** Chan further disclosed the gateway of claim 11, wherein the packet headers include at least one of IP type headers, UDP type headers and RTP type headers (*see col.6 line 33-39*).

d) **In Regarding to Claim 15:** Chan further disclosed the gateway of claim 11, wherein the stream includes non-voice data bits, the processor is further adapted to: demultiplex the voice data bits from the non-voice data bits in the stream prior to adding the headers (*see col.4 lines 46-54: filters and packages data (hence demultiplex) into data packets*).

e) **In Regarding to Claims 18-20:** the claimed subject matters of these claims are the same as that of claims 11-13 respectively. In which, the claims 11-13 claimed for a gateway at a source side (transmitting device) while the claims 18-20 claimed for a gateway at a destination side (receiving device). Therefore, the rejections to claims 11-13 would also apply to claims 18-20, which claimed for a gateway at the destination side of a communication network as taught.

f) **In Regarding to Claims 22-24:** the claimed subject matters of these claims are the same as that of claims 18-20 respectively. In which, the claims 18-20 claimed for a gateway at a receiving side at the end of a communication network while the claims 22-24 claimed for a device the receiving side of the communication network, wherein this device is incorporated with such a receiving gateway. Therefore, the rejections to claims 18-20 would also apply to claims 22-24 in a device as taught.

g) **In Regarding to Claims 28-30 and 32:** the claimed subject matters of these claims are the same as that of claims 11-13 and 15 in the manner of an article as taught. Therefore, the rejections to claims 11-13 and 15 would also apply to these claims.

h) **In Regarding to Claims 33-35:** the claimed subject matters of these claims are the same as that of claims 28-30 respectively. In which, the claims 28-30 claimed for an article located at a transmitting side of a communication network while the claims 33-35 claimed for another article located at the receiving side of the communication network. Therefore, the rejections to claims 28-30 would also apply to claims 33-35 as an article at the receiving side of the communication network.

i) **In Regarding to Claims 41-43 and 45:** these claims are rejected for the same reasons as claims 11-13 and 15 respectively because the apparatus in claims 11-13 and 15 can be used to practice the method steps of the claims 41-43 and 45.

j) **In Regarding to Claims 46-48:** these claims are rejected for the same reasons as claims 22-24 respectively because the apparatus in claims 22-24 can be used to practice the method steps of the claims 46-48.

12. **Claims 14, 21, 25, 31, 44 and 49** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Chan et al.** (US Patent No. 6,711,160) in view of **Cave et al.** (US Patent No. 6,404,746) as applied to claim 18 above, and further in view of **Sistanizadeh et al.** (US Patent No. 5,790,548).

a) **In Regarding to Claim 14:** **Chan disclosed** all aspects of this claim as set forth in claim 11.

**Chan failed to explicitly disclose** the first connection has a rated capacity of 28.8 kbps  
**Sistanizadeh explicitly disclosed** such a connection has such a rated capacity of 28.8 kbps (*see col.3 lines 2-8*).

At the time of the invention, **it would be obvious** to a person of ordinary skill in the art to combine such a connection has such a rated capacity of 28.8 kbps, as taught by Sistanizadeh with Chan in a purpose of multi-media services including Internet access. **The motivation** for doing so would have been to provide more bandwidth to residential consumers. Therefore, it would have been obvious to combine Sistanizadeh with Chan in the invention as specified in the claim.

**b) In Regarding to Claim 21:** the claimed subject matters of this claim are the same as that of claim 14. In which, the claim 14 claimed for a gateway at a transmitting side at the end of a communication network while the claim 21 claimed for another gateway at the receiving side of the communication network. Therefore, the rejections to claim 14 would also apply to claim 21.

**c) In Regarding to Claim 25:** the claimed subject matters of this claim are the same as that of claim 21. In which, the claim 21 claimed for a gateway at a receiving side at the end of a communication network while the claim 25 claimed for a device the receiving side of the communication network, wherein this device is incorporated with such a receiving gateway. Therefore, the rejections to claim 21 would also apply to claim 25 in a device as taught.

**d) In Regarding to Claim 31:** the claimed subject matters of this claim are the same as that of claim 14 in the manner of an article as taught. Therefore, the rejections to claim 14 would also apply to this claim.

**e) In Regarding to Claim 44:** this claim is rejected for the same reasons as claim 14 because the apparatus in claim 14 can be used to practice the method steps of the claim 44.

**f) In Regarding to Claim 49:** this claim is rejected for the same reasons as claim 25 because the apparatus in claim 25 can be used to practice the method steps of the claim 49.

***Examiner Information***

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anthony T Ton whose telephone number is 703-305-8956. The examiner can normally be reached on M-F: 8:00 am - 4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Douglas W Olms can be reached on 703-305-4703. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

ATT  
8/14/04

  
Phirin Sam